

Model:TLPA20M6G-35-38

Power Amplifier 0.02-6GHz,Gain:35dB,Psat:38dBm

Feature:

- Ultra Wide Band: 0.02-6GHz
- Gain:33dB Min
- Psat Output Power:36dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.02-6			GHz
Gain	33	35		dB
Gain Flatness		±3	±5	dB
Output P1dB	35	37		dBm
Output Psat	37	38		dBm
Harmonics@Pout=37dBm			-10	dBc
Input VSWR		1.5	2	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		0.5	1.7	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	100*86*40	mm
Weight	250	g

Absolute Maximum Ratings:

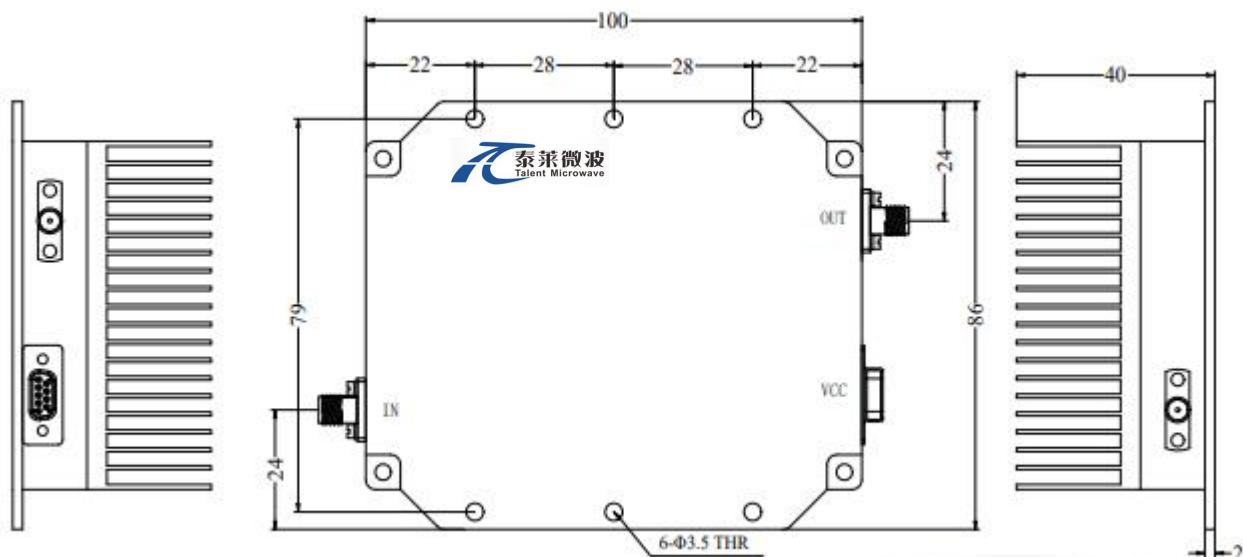
Parameter	Value
Supply Bias Voltage	+30V
RF Input Power	5dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

J30J-9ZKW-J(J30J-9TJL)



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Pin	Identification	Type	Function specification
1	Power amplifier enable	Input	A high (or suspended) level turns on the power amplifier, and a low level turns it off
2	GND	Input	Power supply negative
3	GND	Input	Power supply negative
4	GND	Input	Power supply negative
5	GND	Input	Power supply negative
6	+28V	Input	Power supply positive +26.0-30.0VDC
7	+28V	Input	Power supply positive +26.0-30.0VDC
8	+28V	Input	Power supply positive +26.0-30.0VDC
9	+28V	Input	Power supply positive +26.0-30.0VDC

Notes: TTL is 5V

Environmental Conditions:

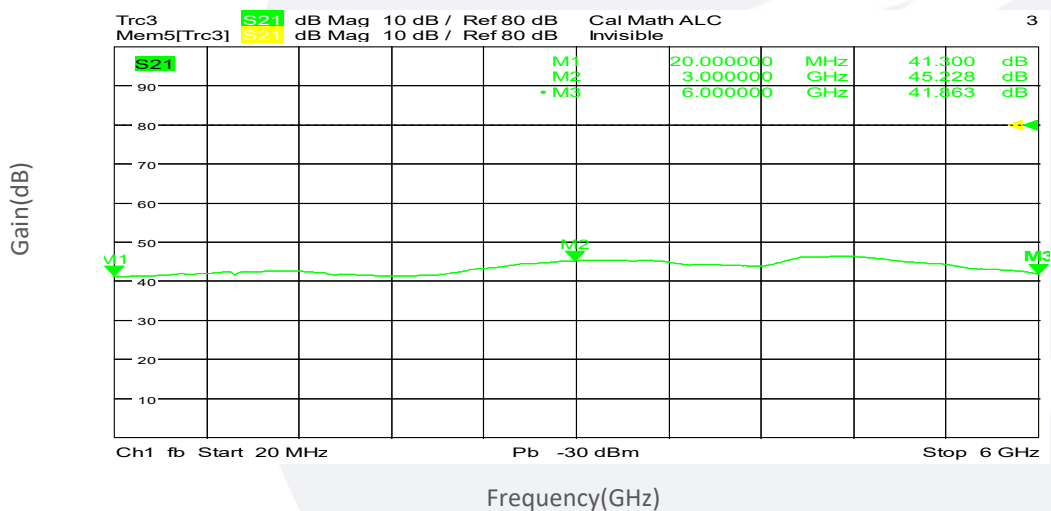
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLPA20M6G-35-38	Power amplifier 0.02-6GHz,Gain:35dB,Psat:38dBm,+28V DC,Without Heatsink.	Rev.1.0
TLPA20M6G-35-38-HS	Power amplifier 0.02-6GHz,Gain:35dB,Psat:38dBm,+28V DC,With Heatsink.	Rev.1.0

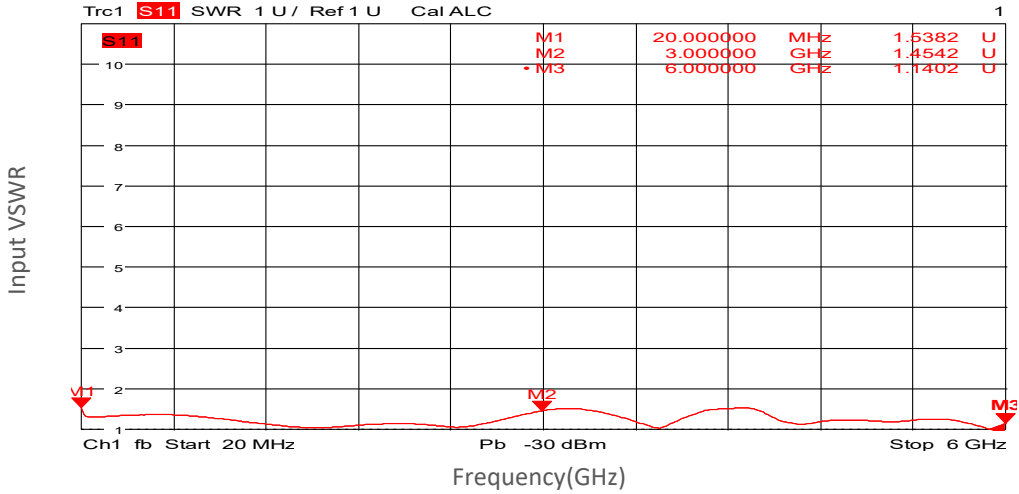
Typical Performance Data:

Gain vs Frequency

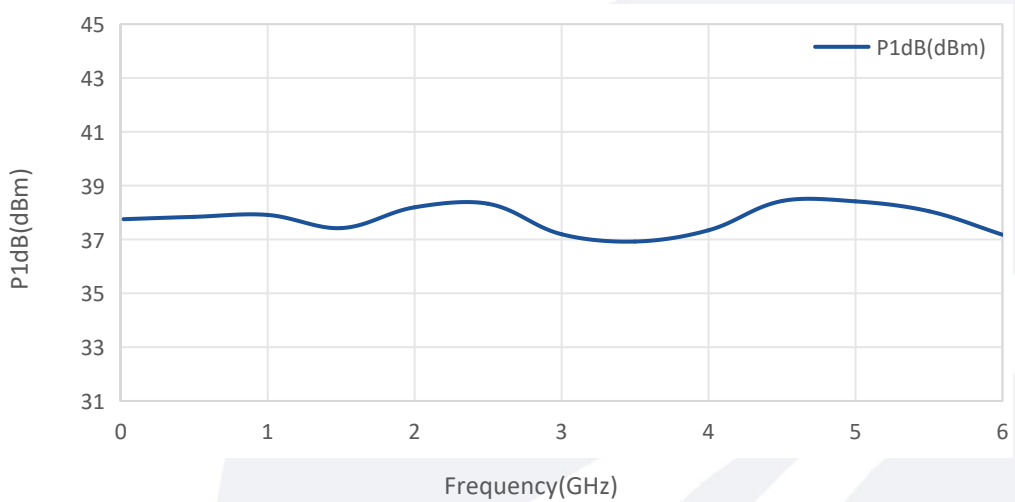


Typical Performance Data:

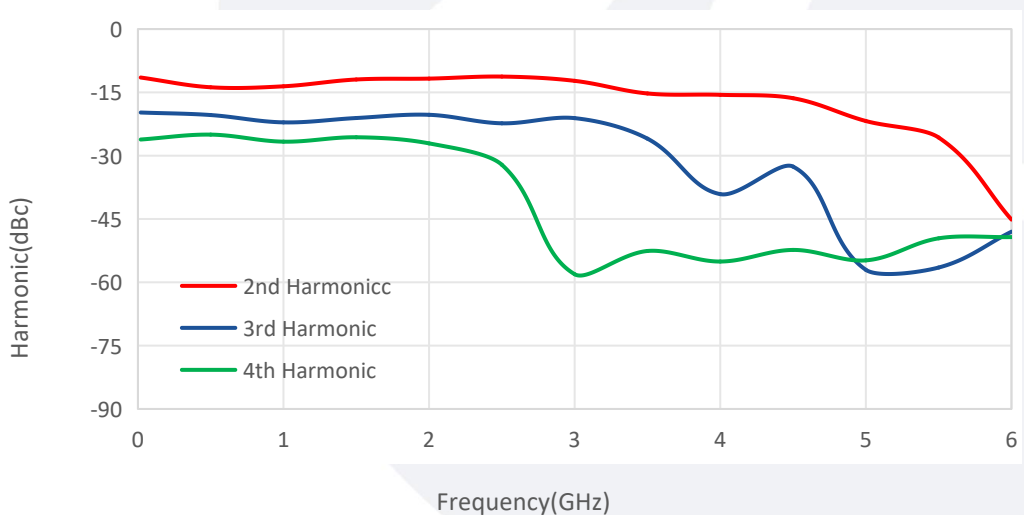
Input VSWR vs Frequency



P1dB vs Frequency



Harmonic vs Frequency



Typical Performance Data:

Psat vs Frequency

